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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/614,395

07/03/2003

Shane S. Taylor

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EXAMINER

SCHNEIDER, CRAIG M

ART UNIT

PAPER NUMBER

3753

MAIL DATE

DELIVERY MODE

12/03/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/614,395	Applicant(s) TAYLOR ET AL.	
	Examiner CRAIG M. SCHNEIDER	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 66 and 97-103 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 66 and 97-103 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 66 and 97-103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Contreras (4,015,630) in view of Taylor (6,601,609) and further in view of Hershman (2,725,072).

Contreras discloses a regulator device configured to reduce the gas pressure of a source of pressurized breathable gas in a self contained underwater breathing apparatus comprising a regulator housing (10); a gas inlet opening (11 where 16 branches off) located within a bore in the regulator housing; a gas valve comprising a housing possessing an inlet opening (area that 11 is pointing to in Figure 1) and an exit opening (area that is right before the gas inlet opening); a passageway (area after 11 and right before the branch leading to 16) extending downstream of the inlet opening, a moveable cover member (12a) adapted to cover the inlet opening of the gas valve, the moveable cover member having a range of motion between a first position wherein the moveable cover member covers the inlet opening and a second position outside of the passageway wherein the moveable cover member is displaced from the inlet opening as seen in Figure 1, the moveable cover member being biased towards the first position (12 and 13 screws the cover into place therefore it is biased into the first position); and the gas outlet opening of the gas valve is in fluid communication with the gas inlet opening of the first stage regulator (col. 2, lines 4-21). Contreras fails to disclose a filter

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located within the passageway and proximate the exit opening and distal the inlet opening so that fluid must pass through the filter to pass through the exit opening, a retainer for removably securing the filter within the exit opening of the passageway, and the housing of the gas valve includes a portion threaded into the bore of the regulator housing and wherein the moveable cover member is adapted to automatically move from the second position to the first position when the valve is disconnected from a source of compressed gas. Taylor discloses a gas valve (60) comprising a housing (62) possessing an inlet opening (80) and an exit opening (116); a passageway (78) extending downstream of the inlet opening and a filter (114) located within the passageway so that fluid must pass through the filter to pass through the exit opening, a retainer (86) for removably securing the filter within the exit opening of the passageway, and the housing of the gas valve includes a portion threaded (68) into the bore of the regulator housing (col. 3, lines 43-50). Taylor fails to disclose the use of a spring assisted closing devices to cover up a passageway. Hershman discloses the use of spring (41) assisted closing devices (40) to cover up a passageway (23)(col. 2, line 20 to col. 3, line 47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a removable gas valve as disclose by Taylor with the device of Contreras, in order to easily replace the gas valve.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the idea of a spring assisted closing device as disclosed

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by Hershman in place of the closing device of Contreras in view of Taylor, to protect the innards of the valve when not in use.

Regarding claim 97, Hershman utilizes a biasing element (41) which is offset from the inlet as seen in Figure 1 and therefore is not aligned with the inlet opening and further is attached to the housing as seen in Figure 1.

Regarding claim 98, the Hershman biasing element would continuously bias the moveable cover member to the first position and be in continuous contact with the movable cover member.

Regarding claims 99 and 100, the biasing element comprises a spring hinge and a resilient arm (31) coupling the movable cover member to an attachment member (30) as seen in Figures 1 and 2.

Regarding claim 101, the resilient arm of Hershman would be in a low stress condition with the moveable cover member being in the first position and a high stress condition with the moveable cover member being in the second position.

Regarding claims 102 and 103, the valve further comprising a screw member (13) threadably connected to the housing and attached to a hand knob (12), the screw member being distal from the moveable cover member with the moveable cover member being in and biased into the first position. The spring assisted closure device of Hershman would allow the screw member to be distal from the moveable cover member when the moveable cover member is biased into the first position; therefore the functional limitation would be met.

Response to Arguments

3. Regarding applicant's remarks, as they may apply to the above, Taylor is relied upon to show the filter located proximate the exit opening and distal the inlet opening.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CRAIG M. SCHNEIDER whose telephone number is (571)272-3607. The examiner can normally be reached on M-F 8:00 -4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. M. S./
Examiner, Art Unit 3753
November 30, 2009

/John Rivell/
Primary Examiner, Art Unit 3753